



# UNITED STATES PATENT AND TRADEMARK OFFICE

*edh*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,179	01/17/2002	William R. Wheeler	10559-607001/P12891	4487
20985	7590	04/22/2005	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			THOMPSON, ANNETTE M	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/054,179	WHEELER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	A. M. Thompson	2825	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01/31/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

Applicants' amendment to application 10/054,179 has been examined. Claims 1, 6, 9, 10, 11, 16, 19, 20, 21, 26, and 29 are amended. Claims 1-30 are pending.

1. Applicants' amendments and remarks have been fully considered, but are not considered persuasive with respect to the prior art rejections. The applicable objections and rejections of the prior office action are incorporated herein.

#### ***Claim Objections***

2. Claim 9 is objected to because of the following informality: Pursuant to claim 9, the claim preamble should state the intended use or purpose of the invention. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### **Rejection of claims 1-30**

4. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Watkins et al., U.S. Patent 5,220,512. Watkins discloses a system for simultaneous, interactive presentation of electronic circuit diagrams and simulation data.

5. Pursuant to claims 1, 9, 11, 19, 21, 29, Watkins discloses a method (c1, c9), article comprising a machine-readable medium (c11, c19), and apparatus (c21, c29) for modeling a logic design (Abstract, Figs. 1, 2; col. 8, ll. 10-48), comprising creating a

Art Unit: 2825

graphical representation of the logic design (col. 5, ll. 26-44); generating simulation code based on the graphical representation (col. 5, ll. 26-44; col. 5, line 59 to col. 6, line 13).

6. Pursuant to claims 2, 12, and 22, wherein the graphical representation is comprised of functional block diagrams and virtual wires that interconnect the functional block diagrams (Fig. 3; col. 5, ll. 26-43).

7. Pursuant to claims 3, 13, 23 wherein creating comprises retrieving the functional block diagrams from a database and arranging the functional block diagrams and the virtual wires to model the logic design (col. 5, ll. 45-58).

8. Pursuant to claims 4, 14, 24, wherein creating comprises defining the functional block diagrams and the virtual wires to model the logic design (col. 8, ll. 10-35).

9. Pursuant to claims 5, 15, 25, further comprising displaying a menu comprised of different types of functional block diagrams (col. 5, ll. 21-24); receiving an input selecting one of the different types of functional block diagrams; retrieving a selected functional block diagram; and creating the graphical representation of the logic design using the selected functional block diagram (col. 5, ll. 26-40).

10. Pursuant to claims 6, 16, 26 further comprising propagating a state through the simulation code (col. 5, ll. 1-13); and determining if there is an error in the logic design based on the propagated state (col. 6, ll. 2-35).

11. Pursuant to claims 7, 17, and 27, wherein the state comprises one of a zero, one and an undefined state (Fig. 4, state table).

12. Pursuant to claim 8, 18, and 28, further comprising providing a visual indication if there is an error in the graphical representation of the logic design (col. 6, ll. 2-6; col. 9, ll. 45-57).

13. Pursuant to claims 10, 20, and 30, further comprising generating simulation code to simulate the operation of the logic design; and testing the logic design by propagating one or more states through the simulation code (col. 6, ll. 6-35; col. 7, ll. 3-47).

### ***Response to Remarks***

14. Applicants' amendment which recites "receiving a selection that corresponds to a type of simulation code" is also disclosed by Watkins at column 5. Accordingly, the rejection of the prior office action is maintained. With respect to the preamble objection, Examiner is merely requiring a more descriptive preamble, not one that will limit the scope of the claims in any way (see e.g. C.R. Bard, Inc. v. M3 Systems, Inc. 48 USPQ2d 1225, 1230-31 (Fed. Cir. 1998)).

### ***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2825

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications should be directed to Examiner A.M. Thompson whose telephone number is (571) 272-1909. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 4:30 p.m..

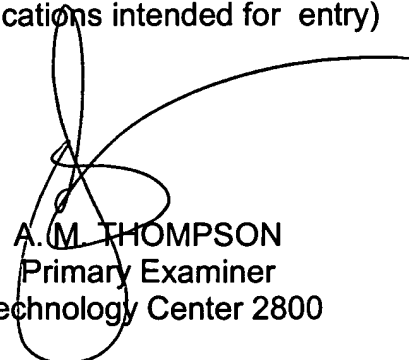
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

17. Responses to this action should be mailed to the appropriate mail stop:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)



A.M. THOMPSON  
Primary Examiner  
Technology Center 2800